THE IMMIGRATION OF LEPIDOPTERA TO THE BRITISH ISLES IN 1980, WITH AN ACCOUNT OF THE INVASION OF THE PAINTED LADY: *CYNTHIA CARDUI* L.

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ANNEXE III

The Painted Lady (Cynthia cardui L.) in 1980

The invasions of the Painted Lady were the most spectacular features of lepidoptera migration in Britain in 1980. Observers from Cornwall to Orkney wrote of it in terms of "hundreds", "a plague", "great abundance", "the flowers taken over by them". This was, however, for short periods near the arrival points and main tracks of the invaders, and it contrasts with a great number of records of singletons or small numbers, which indicate only a thin spread over most of the country. South west and north England, central Wales, and much of Scotland saw most of it. Numbers in south east England were relatively small, and from many midland and eastern counties we have received no reports of it at all. Eggs, larvae of various sizes on thistles, and a few pupae were seen in many places, also up to the far north; but it seems that, except perhaps near the south coast, in a cold and sunless summer only a very small proportion survived to add to the numbers of immigrant butterflies. Nevertheless, though no close estimate is possible, the records we have received certainly covered several thousand butterflies, and the Painted Lady probably had its best year since 1969 or 1966 and possibly even since 1952 or 1948, for which the Annual Migration Records gave estimates of 6,700 and 30,000 butterflies observed.

Single examples of *C. cardui* were seen on the coast of Sussex on April 2 and 4 and another somewhat inland on May 14; three were seen near Eversley, North Hampshire on May 12. But the first large invasion came with the warm south westerly air stream which reached Britain on June 2. Mr. Mr. L. H. Hare has given a graphic account of their arrival near Newquay, West Cornwall on June 4. The first examples were seen in the morning; but from 8.15 to 9 p.m. hundreds were flying wildly up and down a narrow ride leading to the sea at West Pentire. Fourteen paired couples were counted within ten yards, and the canopy of moving butterflies above the ride darkened the evening sky. On the same day they were abundant round Padstow, a little further north. Reports of 500 on the beach near Start Point, south Devon, ascribed to the end of May or early June, and of abundance round Truro and in the Roseland peninsula, on the south Cornish coast, in the first week of June, may also refer to June 4 or a day or so earlier. On June 4, also,

^{*} Folly Hill, Birtley Green, Bramley, Guildford, Surrey.

^{**1} Hardcourts Close, West Wickham, Kent.

hundreds were seen at Aberystwyth, Cardiganshire, especially on flowers of cotoneaster; three were noted in the Isle of Man, one at Boat of Garten, East Invernesshire, and the first of many at Handa Island, West Sutherland. On June 7 over 300 were sighted at Old Lighthouse Island, co. Down, across the Irish Sea.

In Cornwall and Devon many butterflies seem to have settled down near their arrival points, and only a slight spread can be traced eastwards along the south coast, indicated by reports of one to three specimens in various scattered places from Dorset to East Kent and South Essex, and inland in Surrey and Middlesex, from June 5 to 9 and later: those which were fairly frequent in the upper Thames valley round Lechlade from June 8 to 16 may also have come from the south west. At Aberystwyth none were seen to remain by June 6, but in the next few days small numbers were seen, mainly on high ground, in Breconshire and across central Wales to Shropshire. It seems that a large swarm passed quickly east and north across Derbyshire and south Yorkshire to the east coast in Northumberland, and also through North Lancashire and Westmorland into south west Scotland at Gartlea, Dumbartonshire, where the first of many was seen on June 5, and Hawick, Roxburghshire on June 6, and later on to the western islands of Coll and Canna. In eastern Scotland C. cardui was first seen in Fife, South Perthshire, Kincardine and Aberdeenshire on June 5 and 6, becoming abundant later; in Orkney it was already numerous by the evening of June 5. These dates, together with the large numbers involved, suggest that there were separate invasions of eastern Scotland, coming in winds which had shifted by June 5 from the initial south west to south east. There does not, appear, however, to have been any large influx to the east coast of England at this time.

These warm air streams, which gave temperatures on June 4 at 84° F. in London and almost as high far up both the east and west coasts, gave place on June 6 to some days of much cooler northerly winds, which presumably prevented fresh arrivals in Britain. Lesser warmth was resumed from about June 11 to 18. Fresh immigrant species appeared and others became more numerous in this period, but there seem to have been no further influxes of *C. cardui*, unless a small one is represented by over 20 reported in South Essex on June 13 and a further 27 on June 18, with two in West Suffolk on June 13.

The first instinct of the June arrivals on the coast was to feed on almost any available kinds of flowers, before settling down nearby or moving on in swarms which dispersed more or less gradually elsewhere. After dispersal they became territorial, individually or in small groups, often occupying the tops of hills and sand dunes in south, hills up to at least 1,100 feet in mid Wales, and even the 4,000 feet summits of the Cairn Gorms in Scotland. In a Mediterranean climate natural life of adult *C. cardui* is said to be 20 to 30 days; but here this seems to be often prolonged by inactivity due to cold or lack of sunshine. In south England the number of records fell off sharply after the middle of June, and the last survivors were probably those reported in Sussex on July 7 and 11; but in central Scotland and Orkney a few worn ones almost overlapped fresh specimens of the second invasion in the last days of that month.

This second invasion came in very clearly from the east or south east. On the evening of July 29 Mr. P. Q. Winter (Ent Rec., 92: 303-304), returning at mid-night to his home at Muston, near the coast of south east Yorkshire, found four C. cardui settled on or flying round his mercury vapour moth trap, and on the morning of July 30 there were ten more inside it. There were none in a second trap ¼ mile away, and only one in another at Rudston, a little further south and inland. On that day he saw 50/60 which, after feeding at thistles, all flew off heading between west and north west. On July 31 there were 12/15 on most thistle patches, where they remained numerous until cooler weather began on August 6, a few lasting until late in the month. Nearby, around Scarborough about 30 were reported from 29 July to mid August, with some in September and several even from October 1 to 7; and at Robin's Hood Bay, near Whitby 50 were seen on August 4/7, and at Brancepeth, co. Durham the species was common on garden buddleia and elsewhere at the end of July and in early August. At Spurn Head Bird Observatory, further south, on July 30 43 C. cardui arrived suddenly, one of them in the mercury vapour trap; on July 31 there were 100. Small numbers were seen there through August, dwindling in September to the last on October 13, after some southward flight along with V. atalanta had been noticed on October 2. Some internal spread into various parts of Yorkshire was noticed on high ground at Malham Tarn on July 31, Buckden and Arnside in mid August, and in Troutsdale on August 16. In North Lancashire and Westmorland a few records in the first half of the month may have represented further westward spread from the late July immigration; but later the numbers in that area rose sharply, with many sightings in Westmorland from August 22 onwards, 138 counted by the warden at Leighton Moss N. N. R., North Lancashire on August 31, and two in Cumberland on August 31 and September 3. These are strongly suggestive of a further influx from the south west, parallel to one in Cornwall and Devon at the time.

There were also simultaneous invasions at the end of July further north. Many fresh *C. cardui* appeared at Gartlea, Dumbartonshire on July 30, and on the following days a few were seen migrating further westwards; many others settled locally among the thistles, dwindling in number until September 5. The species reappeared at Aberdeen on July 29, and from July 31 onwards it was common widely, both near the coast and inland, with *V. atalanta* in Kincardineshire and Aberdeenshire; numbers fell through September, and the last singles were seen at Banchory on October 2 and 13. On September 28, however, about 20 *C. cardui*, many more *V. atalanta*, and a single *C. crocea* were seen to arrive by sea at Girdlestone Ness, south of Aberdeen, and also at Newtonhill, Kincardineshire. It is not clear whether these represented a southward flight. possibly of locally bred butterflies, or a small further invasion from the east. In Orkney, *C. cardui* was well distributed on July 30 and lasted well into August; and on October 4 six were seen arriving over the sea in a south west wind. On Handa Island, West Sutherland some were seen from August 1 to 7; but we have no other records from the west coast of Scotland then or later.

In the south no large influx noticed at the end of July or in most of August. All of the many records scattered near the coast from South Essex to Devon, inland in Surrey and Middlesex, and in west Wales, are of singles or very small numbers; these were probably off-spring of the June arrivals. But in the last week of August and the first of September a large rise, to 20 to 30 a day, in adults counted at Slapton Sands, south Devon, and also in Dorset, strongly suggest immigration, along with other species, in the prevailing south westerly winds. This is supported by a reference to "hundreds seen in September coming in from the sea in West Cornwall, sailing against the wind, high up, and floating down like autumn leaves." But the records became few again after the middle of September, and C. cardui in all its stages was probably killed off by the cold spell which began on October 1. The latest record received from southern England is of two butterflies seen on samphire blossom in the Isle of Sheppey, East Kent, on October 4. In south west Ireland, however, they lasted longer, several being seen on garden flowers at Killarney on October 12/14.

Local breeding from the early June invaders was well started in fairly warm and sunny weather during most of that month; but larval development was set back in most places by abnormal cloud and cold in the first three weeks of July, before a short-lived heat wave at its end. In most of August and September sunshine and warmth were generally below average in the south and were especially lacking in the west and north of Scotland. The first mention of partly grown larvae of C. cardui was at Swanage, Dorset, on July 15, and, as already noticed, it seems that adults began to emerge on the south coast from early August onwards, though not in great numbers, probably some 55 to 70 days after the laying of the eggs. In the north the process certainly took much longer and was less successful. On the island of Canna, Inner Hebrides, many larvae of very varying sizes were seen on July 27. Other observers have commented on this feature of size differences among larvae even on the same or adjacent thistle plants, which appears to be due to some inherent tendency rather than to any large differences in the dates at which eggs can have been laid. In Orkney, larvae were abundant in July and August, and some were noticed to have survived a week of cold gales before August 23; but no butterflies were seen from these later. At Muston, South East Yorkshire, a few larvae were first seen from July 31 to August 6, and a very small, fresh adult seen on buddleia on September 2 and 3 probably resulted from them; larvae from the second invasion were "literally everywhere" in webs on spear thistles in late August and September, and a few were still left on October 9. M. I. C. Christie, who has watched C. cardui in all its stages both in 1980 and in 1969 on his

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sheep farm at Gartlea and by Loch Lomondside in Dumbartonshire, saw on August 5 several hundred half grown to nearly full grown larvae on Scottish spear thistle (Cirsium lanceolatum): but at the end of the month not a single larva or pupa could be found. He attributes this sweeping mortality not only to the severe weather, but also to the fact that the foliage of this early flowering thistle had withered before the larvae could complete their growth. At Gartlea itself, where plenty of Marsh thistle (C. palustre) and Creeping thistle (C. arvense) were available though apparently less attractive to egg-laying females, there were fewer larvae but some survival to produce perhaps ten distinctively small, dark and very pink butterflies which were seen between September 5 and October 4. The last survivors of the July butterflies had by then disappeared: and no larvae from these were found, despite search. This period of around 90 days from eggs to butterflies is amazingly long for an insect which can be reared in sheltered captivity in half that time. and in the wild in Africa often in less. It shows, however, that the species has considerable power of adjusting its development to weather, which must help it to extend its area of permanent colonisation, even though not in the British Isles.

Both the main invasions of *C.cardui* were accompanied by much smaller numbers of Vanessa atalanta and Nomophila noctuella and also by swarms of the Yponomeutid *Plutella xylostella*. The first two of these fellow travellers, however, certainly came in at other times also and need not have had the same points of origin as C. cardui even though for arrival they shared the same air streams. The first influx of C. cardui came from the south west or south, and both date and direction point to a probable origin in north west Africa, though there is at present no direction evidence for this. "Hundreds upon hundreds" were seen about May 25 in Majorca, which must also have been immigrants; but the date seems too early for them to have come on to Britain. The second invasion, at the end of July, certainly came across the North Sea from the east or south east, probably in winds which blew clock-wise round the south side of the high pressure area which had been established for some time over south Scandinavia and northern Europe. This, together with the large numbers clearly involved, suggests a very distant origin, possibly in south west Russia; but, again, there is at present no supporting evidence for this. In the French Pyrenees one of the authors saw only a dozen, mostly worn, at this time.

This account is based on observations received, directly or through intermediaries, from some 80 observers, to all of whom the authors are very grateful. Even so, it is clearly far from complete, and we should be glad to receive supplementary records, especially and which fill gaps in the areas of record or refer to the finding of larvae or pupa and to successful breeding in the wild.

The Record

CORNWALL, E. Roseland Peninsula, first week June, abundant. CORNWALL, W. West Pentire, 4. 6, first in a.m.; 8.15 to 9p.m., hundreds in lane from the sea; Padstow, 4.6, abundant, and a plague elsewhere later; Truro area, 4.6., abundant; W. Cornwall, September, hundreds sailing in from the sea.

- CUMBERLAND. Cumbrian Fells, last week June/ early July, several singles; E. Curthwaite, 31.8; Bowness-on-Solway, 3.9.
- DERBYSHIRE. Holloway, Matlock Moor, Ashbourne, Darley Park, 6.6; Cotmanhey, 7.6; Strakholmes, 8.6; Elvaston, 12.6.
- DEVON, N. Halwell Forest, 7.6 (2); Lucket Lydeford and Black Torrington, 12.6 (3).
- DEVON, S. Lannacombe Beach, end May or early June, c. 500; Slapton Sands, 6.6 (10); Teignmouth, c.10.6: Slapton Sands, 24.8 (16), 31.8 (17), 1/14.9 (128 on six days).
- DORSET. Uploders, 7.6; Eggardon Hill, 7.6, 8.6 (2): Hod Hill, 7.6; Verwood, Cranborne Chase, 11.6 (2); Swanage Head, 12.7, one larva, small; St. Albans Head, 23.8; Studland, 3.9(c.15).
- DURHAM. Brancepeth, end 8, early 9, many on buddleia, and common generally.
- ESSEX, N. Fingringhoe, one at light, n.e.d.
- ESSEX, S. Bradwell-on-Sea, 5.6, 12.6 (4), 13.6 (21), 18.6 (27);
 4.8(2), 5.8, 7.8, 10.8 (24), 16.8 (25), 20.8 (3), 25.8, 26.8 (13),
 27.8 (28), 30.8, 31.8, 6.9, 14.9, 24.9 (3) 185 in all: Fambridge, c.10.6, on valerian; Canvey Is., 8.6.
- GLOUČESTERSHIRE, N. Lechlade, 8.6, fairly frequent to 16.6, none after.
- HAMPSHIRE, N. Eversley, 12.5 (3).
- KENT, E. Canterbury, 6.6; West Blean Woods, 12.6; Folkestone, Middle Hill, 7.6 (three, 7.30 p.m., flying inland); Hawkhurst, 5.8; Dumpton Gap, 7.8 (two at 7.50 a.m.); Ramsgate, frequently later.
- KENT, W. Knockmill nr. Swanley, 7.6; Woolwich Common, 12.6; West Wickham, 23.8.
- LANCASHIRE, N. v.c. 60, Lytham St. Annes, 8.6(7 or 8 on dunes); St. Annes-on-Sea, 8. and 9.6 (20 on dunes); Hoghton, 8.6(4), 1.8; Lancaster, 15.6; Silverdale, 22/31.8 (18 seen); Leighton Moss, 31.8 (131 counted by warden, some also earlier); nr. Lancaster, 2/9.9 (5 on disused railway).
- LANCASHIRE, S. Blackburn, 6.6 (3).
- ISLE OF MAN. Ballakaighen, 4.6 (3), 6.6 (2), 8.6 (4), 9.6 (2), 12.6.
- MIDDLESEX. Hampstead, 6.6, 3.8, 21.8, 7.9; Broad Street station, 20.8
- NORFOLK, E. Foxley Wood. 24.8 (very worn); Hickling, 24.8. NORTHAMPTONSHIRE. Duddington, 28.8 (in a lay-by).
- NORTHUMBERLAND, N. Alnmouth, 7.9 (several): Craster, 11.9.
- NORTHUMBERLAND, S. Spindlestone Haugh, Budle Bay, 10.6 (c.100).
- NOTTINGHAMSHIRE. Attenborough N. R., 15.6.
- SUFFOLK, W. Lakenheath, 13.6 (2).
- SHROPSHIRE. Pontesbury, c.8.6; Cressage, c.8.6.
- SURREY. Reigate, 8.6; Ranmore Common, 9.6; Dunsfold, 25.8; Tatsfield, 15.8; Bramley, 27.8, 29.9, very worn; Leigh, August/ September, regular in garden; Selsdon, 1/8.9, several daily in garden.

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- SUSSEX, E. Seaford, 2.4, 4.4; Ninfield, 14.5, 8.6, 7.7, 11.7, 9.8, 15.8, 25.8, 26.8, 31.8/6.9 (11 in six days); Peacehaven, 27.7, 3., 7, 2.8, 3.8(5), 7.8, 16.8(2), 21.8 (2), 27.9; Brighton, 4.8, 16.8, 15.9, 20.9, 27.9; Westfield, 7.8; Crumbles, 15.8(5), 30.8(6); Hastings Cliffs, 19.8 (5 on hemp agrimony), Pett Level, 21.8; Lewes, 30.8; Wilmington, 2.9.
- SUSSEX, W. Shoreham, 15.8(2), 26.8(2).
- WESTMORLAND/FURNESS, v.c. 69. Beetham, 8 and 9.6(4), 22.6, 8.8(2), 16.8, 23.8, 12.10; Underbarrow, 8.6(4); Milnthorp, 8/22.6(6); Grange-over-Sands, 17.6; Sedbergh, June; Smardale, 14.8(2); Arnside Knott, 3/10.7 (4 worn); 6/8.8 (9); 22/27.8(14); 10.9; Ulverstone area, 22/30.8 ("a fair number"); Arnside Knott, late 8, several pupae.
- YORKSHIRE, N. E., v.c. 62, Scalby, 7.6; Pickering, 9.6, fresh looking examples; Cloughton and Staintondale, 22.6(2); Scarborough environs, 29.7/26.8 (c. 30), 1/7.10 (several singles); Troutsdale, 16.8 (4).
- YORKSHIRE, S.E., v.c. 61, Spurn Bird Observatory, 6.6 (4, and occasionally later in 6); Muston, 7.6, 28.6; Humanby Gap, 13.7 (very tattered); Tadcaster and Selby, June/July, generally common, also in August; Muston, 29/30.7 (5 around m.v. light trap at mid-night and 10 more inside in a.m.; 30.7 (50/60 feeding at thistles, then flying N. and NW, 31.7, abundant on thistles. Larvae, in varying sizes, first found 31.7, more later, small imagines 1 and 10.9); larvae from July influx abundant September, pupating indoors early October. Rudston, 29/30.7 (one at light); Filey, 2.8 (2), 16.8. Spurn, 30.7 (43, one in m.v. trap), 31.7 (100), 13.8(4), 14.8(42); Scarborough coast, 6.6 (3), 28.9(9), fewer in 9, last 13.10.
- YORKSHIRE, S.W., v.c. 63, Potteries Carr, 7.6; Leeds, 7.6 ("the big day"); Old Rossington, mid 6; Ilkley Moor, 1.8, on sedum.
- YORKSHIRE, CENTRAL., v.c. 64, Fountain Fell nr. Malham, 31.7(4); Buckden and Arncliffe, mid. 8, a few on the highest ground.

Ireland

- DOWN. Old Lighthouse Island, Copeland Group, 7.6, over 300 sighted.
- KERRY, N., v.c. 2, Killarney, 12/14.10, a few at michaelmas daisies.

Scotland

- ABERDEENSHIRE, N. Loch of Strathbeg, 5.6; Old Meldrum, 6.6; by 9.6 at Bullers of Buchan, Ellon, etc., many; Strathbeg, Old Meldrum, 31.7, also in 9.
- ABERDEENSHIRE, S. Aberdeen, 6.6; Tillyfourie, 6.6; by 9.6 many at Staloch, Benachie, Scolt, and throughout the area; Cairn Gorm tops, 4,000 ft., 16.6. Aberdeen, reappeared 29. 7; reported in 8 at Torry, Auchleven, Benachie, becoming scattered in 9; Girdelstoneness, 28.9, c.20, very tired, arriving from the sea, with more V. atalanta.

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- ARGYLL, S., v.c. 97, Easdale, 11.6; Glen Lonan, 11.6, 2.8; Tayallich, 29.7, "last of first invasion".
- BANFFSHIRE. c.10.6.
- CAITHNESS. Freswick, 11.6.
- DUMBARTONSHIRE. Gartlea, 5.6, 6.6 (4), 10/15.6, 10/15 daily on thistles on few fine days, tailing off before 20.7. Gartlea, 30.7, second invasion, 31.7, 2.8, many seen flying off W., thereafter 20/25 settled among marsh thistles, last seen 5.9. Lomondside and Gartles, many eggs in 6 and larvae 8, but few survivors: c.10 native adults at Gartlea, 5.9/4.10.
- DUMFREISSHIRE/KIRKCUDBRIGHTSHIRE. Between Dumfries and Gatehouse of Fleet, numbers in many places. up to four together, before 20.6.
- EAST LOTHIAN. N. Berwick, 1.8 (c.15).
- EASTER ROSS, v.c. 106, and SUTHERLAND, S.E., v.c. 107, Muir of Ord, 16.6, not again until 3.9/3.10, one to five on buddleia on 13 days (41 in all).
- FIFE. St. Andrews, 6.6, in abundance in gardens, lilac the main attraction; 8.8; Saline, 6.6, "everywhere, mixed with *V. atalanta*"; Tentsmuir, 8.8.
- INNER HEBRIDES, v.c. 104. Isle of Canna, 9.6 (2), 10.6, 11.6 (5), 12.6, common; 26.7, many larvae of differing sizes; North Rona, 23.6.
- INVERNESS-SHIRE, E., v.c. 96. Boat of Garden, 4.6; Loch Ness, 9.6.
- INVERNESS-SHIRE, W., v.c. 97. Appin, 11.6; Loch Arkaig, 12.6; Mallaig, 17.6.
- KINCARDINESHIRE. Banchory, 6.6, a few, and until 23.6; 31.7 (c.20), and common along the coast; in September, daily, last 2 13.10; Durris, 6.6; Newtonhill, 28.9 (6 on sedum).
- MULL and COLL, v.c. 103. Isle of Coll, 7/14.6, c.12 daily, apparently well settled.
- ORKNEY. Orphir, 5.6, by evening numerous throughout the islands; 31.7, well distributed; larvae common on thistles in 8, some surviving 28.8 after cold spell, but no adults seen later; Mull Head, 4.10 (6 seen arriving over sea in SW wind).
- OUTER HEBRIDES, v.c. 110. Shiant Is., 21.6, 22.6.
- PERTHSHIRE, S. Crieff, 5.6 (1 or 2); 6.6, "wherever something on which to feed, in particular aubretia, valerian, lilac"; 7.6, "the bugle patches taken over"; 31.7, "a mass emergence, continuing in profusion until mid August, last straggler 27.8; 14.9 to 12.10, a further brood, in vastly reduced numbers.
- ROXBURGHSHIRE. Hawick, 6.6 (6); June, widely spread in good numbers, many eggs found.
- SUTHERLAND, S.W., v.c. 108. Handa Is., 4.6, 12.6 (15 plus), 14.6 (14 plus); mid 6/1.8, one/five on 23 days, last 6.8; Tongue, 10.6; Airdtorrisdale, 10.6; Cape Wrath, 16.6 (3).
- WESTER ROSS, v.c. 105. Torridon, 8.6.
- WEST LOTHIAN. Winchburgh, 12.6, 16.8, only two seen.

Wales

BRECONSHIRE. Ffowydogg Common, 650 ft., 5.6; Treflys,

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8.6 (6 on bluebells), Garth near Llan gammarch; Gorse Bank, 8.6 (two on clover), 13.6 (2), 16.6; Cym-gn Fawr, 600 ft., 12.6. CARDIGANSHIRE. Aberystwyth, 4.6, hundreds on flowers, none left by 6.6; Coedmore, 9.8, 13.8, 16.8, 26.8, 28.8.

DENBIGHISHIRE. Abergele, 6.6(2), 9.8(4), 15.8(3); Llandulas beach, 15.6 (2).

MERIONETHSHIRE. Dolgelly, 8.6 (6 seen over two acres).

MONMOUTHSHIRE. Peterstone sea wall, 7.6; Wentwood, 10.6; Newport docks, 20.8; Usk, 2.9 (2 on buddleia).

PEMBROKESHIRE. Moylgrove, 26.8 (2), 28.8; Martingrove and Marloes, 11.10 (2).

RADNORSHIRE. Coles Hill nr. Presteigne. 1097 ft., 12.6.

Some Notes on Ereaatophyes Aleatrix Diakonoff (LEP.: OECOPHORIDAE) – In May 1973, a Dutch collector caught a specimen of the family Oecophoridae along a road south of the town of Nijmegen (Province of Gelderland), which appeared to be new to science, and which Dr. A. Diakonoff described (in Ent. Ber., Amst., 35: 187-189) as Eratophyes aleatrix. For several years after no other specimen was observed and the biology of the species remained unknown, until by pure chance this gap in our knowledge was filled. Brother V. Lefeber, a keen hymenopterist, had collected in Limburg for several years dead wood from which to breed Hymenoptera, and from old birch wood not only did these insects appear, but also a number of E. aleatrix (cf. Diakonoff and Lefeber, Ent. Ber., Amst., 40: 38-40). It became clear, therefore, that the E. aleatrix has the same biology as many other species of the family, and in later years aleatrix was also bred from willow branches, so that it is not restricted in its choice of wood.

In April 1980, accompanied by Mr. L. I. P. van Aartsen, I collected pieces of decaying wood from dead birch trees with a diameter of 10-15cm., taking care not to collect wood inhabited by ants as they eat everything alive they meet. I selected pieces with the bark still attached, although this was sometimes as thin as paper, owing to the long time the wood had lain on the ground. I kept the wood in a bag with a net on top and closed by a zipfastener, and placed it in a wheelbarrow in the shed. During sunny periods, the wheelbarrow was placed outside to expose the bag to the sun. I was very lucky, for in the latter part of May and in June a number of *aleatrix* appeared; also some *Oecophora bractella* (L.) and *Nemapogon personella* (Pierce & Metcalfe) made their appearance, as well as of course numbers of beetles, flies and wasps.

The species must lead a very concealed life, which is no doubt the reason for its late discovery. Therefore, I should recommend British lepidopterists to try their luck by collecting dead wood in the spring, and even if they do not obtain *Eratophyes aleatrix*, there is of course always a real chance of other good species. The moth is very beautiful. and its discovery in Britain would be well worth attempting. – J. B. WOLSCHRYN, Beatrixweg 8^c, 8181 Le Heerde, Holland.